



# carbon monoxide

Preventing carbon monoxide  
poisoning in your home



DEPARTMENT  
OF HEALTH  
Indoor Air Unit

# Carbon Monoxide and Your Home

Carbon monoxide (CO) is a colorless, odorless gas created when a fuel is burned. Common fuels include natural gas, propane, gasoline and wood. Since CO has no smell or taste, you cannot detect the gas with your senses. Dangerous concentrations of CO can build up indoors and cause illness before you realize you are being poisoned. Symptoms of CO poisoning are very similar to the flu and this may cause you to ignore the early signs of poisoning.

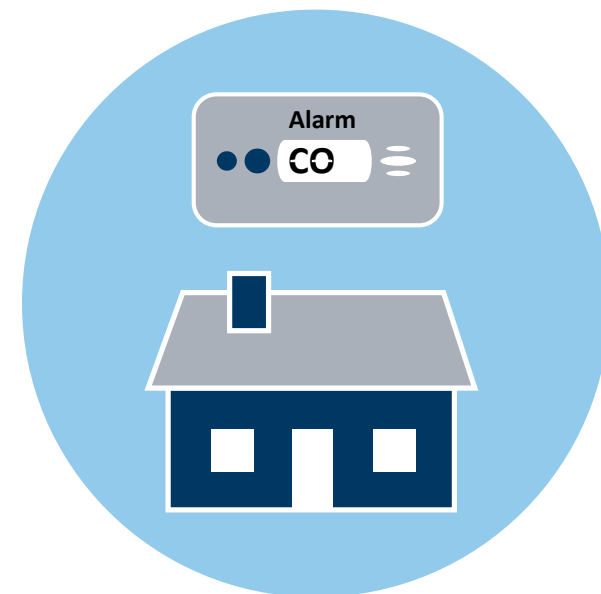
## Each year, accidental CO poisoning causes on average:

- 400 deaths in the U.S.
- 14 deaths in Minnesota

The good news is that carbon monoxide poisoning can be prevented with simple actions such as installing a CO alarm in your home. This brochure will explain the causes and health effects of CO exposure and explain ways to maintain your home. You can prevent CO poisoning and keep your family safe.

## Table of Contents

Carbon Monoxide and Your Home	1
Sources of CO in Your Home	3
Recreation and CO	5
Know the Symptoms of CO Poisoning	7
CO Alarms in Your Home	9
Furnaces	10



# Sources of CO in Your Home

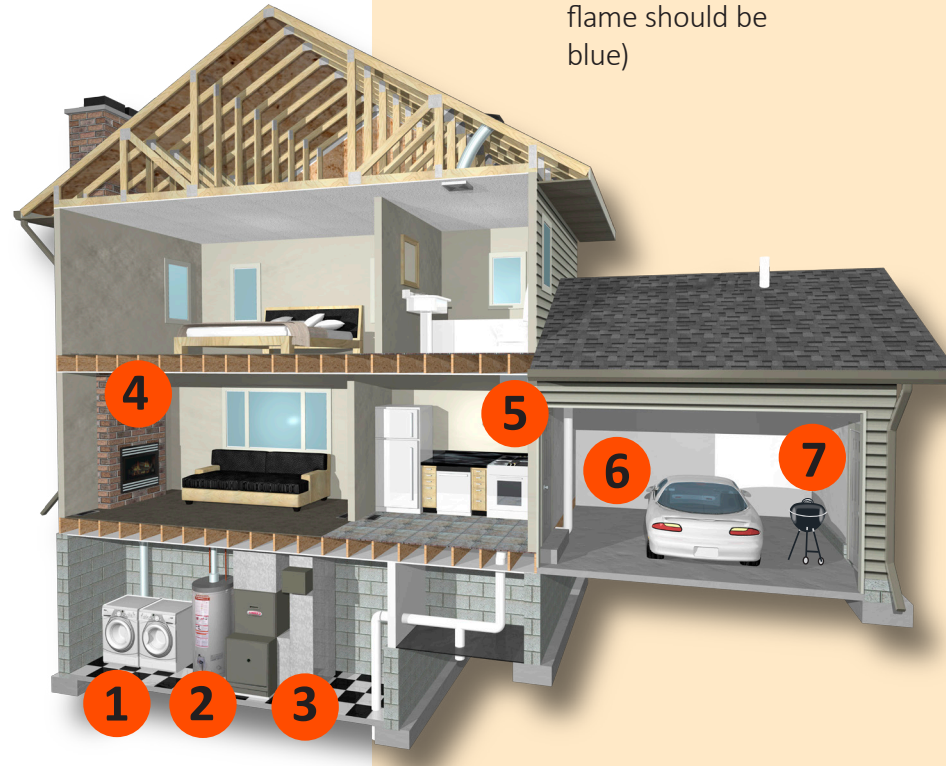
CO is produced whenever a fuel burns.



Types of fuel include:

-  Natural gas
-  Propane
-  Gasoline
-  Wood

Homes with fuel burning appliances and homes with attached garages are more likely to have CO problems.



## Signs appliances are not venting properly

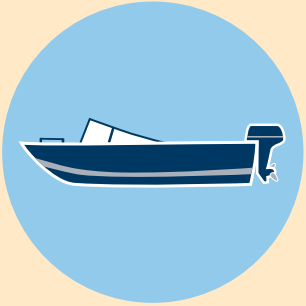
- Streaks of soot around appliances
- Orange or yellow flame in pilot lights or gas burners (the flame should be blue)
- No upward draft in chimney
- Excess moisture
- Rusting flue pipes

Properly maintain fuel burning appliances and vent them to the outside air.

Potential CO sources:

- |    |                      |    |                                    |
|----|----------------------|----|------------------------------------|
| 1. | Clothes dryers (gas) | 4. | Fireplaces                         |
| 2. | Water heaters        | 5. | Gas stoves                         |
| 3. | Furnaces and boilers | 6. | Cars                               |
|    |                      | 7. | Grills, generators and power tools |

# Recreation and CO



## Boats

- Be aware of where a boat motor exhausts.
- Tow passengers at least 20 feet away from the back of the boat.
- Boats equipped with a cabin are required to have CO alarms.



## Ice Fishing

- Regularly inspect heating equipment and verify it is in good condition before use.
- Consider using a battery powered CO alarm in ice houses.



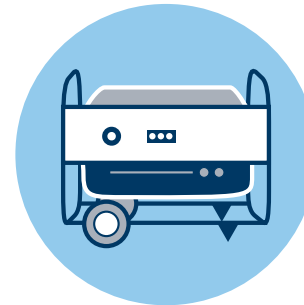
## Camping

- Camp stoves, grills and fuel-burning lanterns are made for outdoor use. Never use them inside of a tent, RV or cabin.



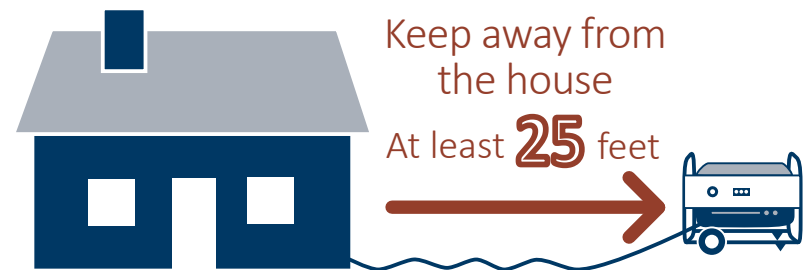
## Garages

- Do not use charcoal or gas grills inside of closed garages.
- Avoid idling car engines in enclosed spaces.
- Avoid using fuel-burning tools indoors. Examples include pressure washers, leaf blowers, lawn mowers, or concrete saws.



## Portable Generators

- Never place a portable generator indoors. They can produce a lot of exhaust.
- Keep generators away from windows and doors.



# Know the Symptoms of CO Poisoning

CO is often called the “silent killer” because the symptoms of CO poisoning are very similar to the flu. This means that many people will ignore the early signs and let the poisoning get worse.

For most people, the first signs of exposure include:

- Headache
- Breathlessness with mild exercise
- Dizziness
- Fatigue
- Nausea



Symptoms can progress to:

- Confusion and irritability
- Impaired judgment and loss of coordination
- Unconsciousness

There are some signs that it is CO poisoning and not the flu:

- You feel better when you are away from home
- Symptoms appear or seem to get worse when using fuel-burning equipment
- Everyone is sick at the same time (the flu virus usually spreads from person to person)
- No fever, no body aches, no swollen lymph nodes

Anyone can become sick and die from CO poisoning when exposed at very high levels.

# CO Alarms

Under Minnesota law, every home is required to have at least one operating CO alarm within 10 feet of every room used for sleeping.

The alarms can be hard-wired, battery powered or plug-in devices. Make sure that alarms are UL listed and follow the package instructions for proper placement.



## CO alarms do not last forever

Most alarms need to be replaced every 5 – 7 years. Look at the owner's manual to see the recommended replacement schedule.

## If the CO alarm sounds:

- Go outside to fresh air.
- Make sure everyone is accounted for.
- If exhibiting symptoms of CO poisoning, call your local fire department or 9-1-1.
- If feeling fine, call your gas utility company.
- Do not re-enter the home until it is safe.
- Identify the source of the CO and make repairs.

# Furnaces

CO poisonings occur more often in the winter months and one of the largest contributors are furnaces. Have your furnace checked by a qualified heating contractor once a year, this includes having an annual tune-up. Not only is this important to maintain your furnace, but the contractor will look for potential CO problems.





**Indoor Air Unit  
PO Box 64975  
St Paul, MN 55164-0975  
1-651-201-4601  
1-800-798-9050**

**[health.indoorair@state.mn.us](mailto:health.indoorair@state.mn.us)  
[www.health.state.mn.us](http://www.health.state.mn.us)**

4/2017 ID #56687